

Permit No: 147-97-TV (R2)

Plant ID: 0072

Louisville Metro Air Pollution Control District
850 Barret Ave., Louisville, Kentucky 40204
March 31, 2011

Title V Statement of Basis

Company: Ford Motor Company-Louisville Assembly Plant

Plant Location: 2000 Fern Valley Road, Louisville, Kentucky 40213

Date Application Received: 07 August 2008

Application Number: 11042

Date of Proposed Permit: 03/31/2011

District Engineer: Shannon Clemons Hosey

Permit No: 147-97-TV (R2)

Plant ID: 0072

SIC Code: 3711

NAICS: 336112

AFS: 00072

Introduction:

This permit will be issued pursuant to: (1) Regulation 2.16, (2) Title 40 of the Code of Federal Regulations Part 70, and (3) Title V of the Clean Air Act Amendments of 1990. Its purpose is to identify and consolidate existing District and Federal air requirements and to provide methods of determining continued compliance with these requirements.

Jefferson County is classified as an attainment area for lead (Pb), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), 1 hr and 8 hr ozone (O₃), and particulate matter less than 10 microns (PM₁₀); and is a non-attainment area for particulate matter less than 2.5 microns (PM_{2.5}).

Application Type/Permit Activity:

- ☐ Initial Issuance
- ☐ Permit Revision
 - ☐ Administrative
 - ☐ Minor
 - ☐ Significant
- ☐ Permit Renewal
- ☒ Construction

Compliance Summary:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Compliance certification signed | <input type="checkbox"/> Compliance schedule included |
| <input type="checkbox"/> Source is out of compliance | <input checked="" type="checkbox"/> Source is operating in compliance |

I. Source Information

1. **Product Description:** Manufacture of automobiles.
2. **Process Description:** Vehicle bodies are assembled and primed in the body shop. A variety of sealers are applied to the bodies which are then painted. Wax is applied to certain body parts. Next, windshields and back lights are installed, then a structural adhesive is used to bond glass to the bodies.
3. **Site Determination:** There are no other facilities that are contiguous or adjacent and under common control.
4. **Emission Unit Summary:**

Emission Unit	Equipment Description
U002-U004	Five (5) Boilers
U008	Volatile Organic Liquid Storage Tanks
U009	Glass Installation
U010	E-Coat Operation
U011	Guidecoat Operation
U012	Topcoat Operation
U013	Plant-wide Product Fueling
U014/U022	Paint Equipment Cleaning Operation
U015	Sealer Deck
U016	Final Repair Spray Booth
U023	Phosphate Operation
U025	Twelve (12) Direct Heat Exchangers

5. **Fugitive Sources:** There are no fugitive emissions.
6. **Permit Revisions:**

Revision No.	Issue Date	Public Notice Date	Type	Attachment No./Page No.	Description
N/A	10/6/2000	4/23/2000	Initial	Entire Permit	Initial Permit Issuance
R1	9/17/2010	7/19/2010	Initial / Renewal	Entire Permit	5 year Renewal; Incorporate PAL, STAR TAC requirements, RO change, DRE for E-coat control device change and 112(J) Part 1 & 2 applications.
R2	3/31/2011	NA	Admin Revision	Pages 43,45 and 50	Revision to include permit 229-96-O, add NOx RACT language and correct Methanol Tank Vapor Pressure

7. Emission Summary:

Pollutant	Actual Emissions (tpy) 2008 Data	Pollutant that triggered Major Source Status (based on PTE)
CO	32.02	Yes
NO_x	38.11	Yes
SO₂	0.23	No
PM	3.77	No
VOC	273.0	Yes
Single HAP > 1 tpy		

Pollutant	Actual Emissions (tpy) 2008 Data	Pollutant that triggered Major Source Status (based on PTE)
Methanol	2.43	Yes
Xylene	9.1	Yes
Toluene	1.93	Yes
Ethylbenzene	1.84	Yes
Total HAPs	21.78	Yes

8. Applicable Requirements:

☒ PSD ☒ NSPS ☒ SIP ☒ MACT
☐ NSR ☐ NESHAPS ☒ District-Origin ☐ Other

9. Future MACT Requirements: The federal regulation 40 CFR 63, Subpart DDDDD has been vacated since June 8, 2007, therefore the boiler MACT requirements will not be included in this permit.

10. Referenced Federal Regulations in Permit:

40 CFR 63 Subpart IIII	National Emission Standards for Hazardous Air Pollutants – Surface Coating of Automobile and Light Duty Trucks
40 CFR 63 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
40 CFR 63 Subpart EEEE	Organic Liquids Distribution Operations
40 CFR 60 Subpart MM	National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations
40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

II. Regulatory Analysis

1. Acid Rain Requirements: The source is not subject to the Acid Rain Program.

2. **Stratospheric Ozone Protection Requirements:** Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. This source does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.
3. **Prevention of Accidental Releases 112(r):** The source does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.

4. **Basis of Regulation Applicability**

- a. **Plant-wide**

The source is subject to a *plant-wide* PAL limit of 1316 tons of VOC during any consecutive 12-month period.

The source is subject to a *plant-wide* PAL limit of 21.2 tons of PM during any consecutive 12-month period.

The source is subject to a *plant-wide* PAL limit of 21.2 tons of PM₁₀ during any consecutive 12-month period.

The source is subject to a *plant-wide* PAL limit of 17.2 tons of PM_{2.5} during any consecutive 12-month period.

The source is subject to a *plant-wide* PAL limit of 99 tons of NO_x during any consecutive 12-month period.

The source is subject to a *plant-wide* PAL limit of 39.33 tons of SO₂ during any consecutive 12-month period.

The source is subject to a *plant-wide* PAL limit of 151.4 tons of CO during any consecutive 12-month period.

Regulations 5.01, 5.21, and 5.23 (STAR Program) establishes requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards.

The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels whether specifically established by modeling or derived from default de minimis levels. (Regulation 5.01, section 3.)

The TAC emissions from the combustion of natural gas are considered to be “de minimis emissions” by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas. (Regulation 5.01, section 1.6.7)

b. Emission Unit U002-U004 – Five Boilers

i. Equipment:

P/PE	Capacity	Installation Date	Applicable Regulation	Basis for Applicability
E02A	146 MM Btu/hr	1954	6.07	Boilers with heat generating capacities greater than 1 mmbtu/hr, modified before April 9,1972, are subject to Regulation 6.07 for PM and SO ₂ .
			6.42	Boilers emitting large amounts of NO _x are subject to Regulation 6.42 for major nitrogen oxides emitting facilities.
E04A	63.6 MM Btu/hr	1995	7.06	Boilers with heat generating capacities greater than 1 mmbtu/hr, modified after April 9,1972, are subject to Regulation 7.06 for PM and SO ₂ .
			6.42	
			40 CFR 60 Subpart DC	
E04B	63.6 MM Btu/hr	1995	7.06	Boilers emitting large amounts of NO _x are subject to Regulation 6.42 for major nitrogen oxides emitting facilities.
			6.42	
			40 CFR 60 Subpart DC	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
E05	33.5 MM Btu/hr each	1996	7.06	Boilers with heat generating capacities greater than 1 mmbtu/hr, modified after April 9,1972, are subject to Regulation 7.06 for PM and SO ₂ .
			40 CFR 60 Subpart DC	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

ii. **Standards/Operating Limits**

a. **PM**

- i. See Permit 245-09-C (R1) PAL limits.
- ii. The emission standard for PM is determined in accordance with Regulation 6.07, section 3.1 and 7.06, section 4.1.4

b. **Opacity**

Regulation 6.07, section 3.2 and 7.06, section 5.1.1 establishes an opacity standard of less than 20%.

c. **SO₂**

- i. See Permit 245-09-C (R1) PAL limits.
- ii. For Emission Point E02A the emission standard for SO₂ is determined in accordance with Regulation 6.07, section 4.1.
- iii. For Emission Point E04A, E04B and E05 the emission standard for SO₂ is determined in accordance with Regulation 7.06, section 5.1.1.
- iv. Emission Points E04A, E04B and E05 are subject to 40 CFR 60, Subpart Dc. However, there is no SO₂ emission standard for natural gas fired boilers in Subpart Dc.

d. **NO_x**

Regulation 6.42 requires the owner or operator shall not allow the NO_x emissions to exceed 99 tons during any consecutive 12-month period in order to avoid NO_x RACT.

iii. **Monitoring**

a. **PM**

Maintain records of monthly natural gas and/or other fuel usage.

b. **Opacity**

Regulation 6.07 and 7.06 does not require any specific monitoring requirements for opacity, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit.

c. **SO₂**

Regulation 6.07 and 7.06 does not require any specific monitoring requirements for SO₂, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure compliance with the terms and conditions of the permit.

d. **NO_x**

Maintain records of monthly fuel usage, and use AP-42 emission factors and/or fuel analysis data, to calculate monthly emissions.

iv. **Record Keeping**

a. **PM**

See PM Monitoring.

b. **Opacity**

Regulation 6.07 and 7.06 does not require any specific record keeping requirements for opacity, however, Regulation 2.16, section 4.1.9.2. requires sufficient record keeping to assure compliance with the terms and conditions of the permit.

c. **SO₂**

40 CFR 60, Subpart Dc requires records of the amount of fuel combusted each month. Regulation 6.07 and 7.06 does not require any specific record keeping requirements for SO₂, however, Regulation 2.16, section 4.1.9.2. requires

sufficient record keeping to assure compliance with the terms and conditions of the permit.

d. **NO_x**

The source shall calculate and record the monthly and 12 consecutive month *plant-wide* NO_x emissions for each month in the report period.

v. **Reporting**

a. **PM**

Regulation 2.16, section 4.1.9.3. requires sufficient reporting requirements to assure compliance with the terms and conditions of the permit. The source shall report any deviations from the permit.

b. **Opacity**

Regulation 2.16, section 4.1.9.3. requires sufficient reporting requirements to assure compliance with the terms and conditions of the permit.

c. **SO₂**

There are no periodic compliance reporting requirements for SO₂.

d. **NO_x**

Regulation 2.16, section 4.1.9.3. requires sufficient reporting requirements to assure compliance with the terms and conditions of the permit.

c. **Emission Unit U008 - Volatile Organic Liquid Storage Tanks**

P/PE	Capacity	Installation Date	Applicable Regulation	Basis for Applicability
E08A Methanol Tank	6,000	2002	7.12	VOC storage tanks greater than 250 gallon capacity are subject

P/PE	Capacity	Installation Date	Applicable Regulation	Basis for Applicability
E08G UG Solvent Tank	10,000	1986	7.12	to Regulation 7.12 for VOC which were installed after April 19, 1972.
E08M Anti-Freeze Tank	20,000	1990	7.12	
E08N Power Steering Fluid Tank	20,000	1990	7.12	
E08O Brake Fluid Tank	6,000	1980	7.12	
E08P Diesel Fuel Tank	20,000	After 1972	7.12	

ii. **Standards/Operating Limits**

VOC

- 1) Regulation 7.12, section 3.3 requires submerged fill if the materials have an as stored vapor pressure of 1.5 psia or greater. Regulation 7.12 applies due to the size of the tanks, however, since the vapor pressure as stored is less than 1.5 psia there are no applicable emission or equipment standards.
- 2) See Permit 245-09-C (R1) PAL limits

iii. **Monitoring**

VOC

The source is required to monitor and maintain records of the material stored in each storage vessel. If the contents of the storage vessels are changed, a record shall be made of the new contents, the new vapor pressure, and the date of the change in service.

iv. **Record Keeping**

VOC

The source shall maintain records of the material stored in each storage vessel. If the contents of the storage vessels are changed, a

record shall be made of the new contents, the new vapor pressure, and the date of the change in service.

v. **Reporting**

VOC

There are no Emission Unit specific compliance reporting requirements for the tanks. The source is required to report the throughput for purposes of demonstrating ongoing compliance with the plant-wide PAL VOC emission limit.

d. **Emission Unit U009 - Glass Installation**

i. **Equipment:**

P/PE	Capacity	Installation Date	Applicable Regulation	Basis for Applicability
E009 Glass, Windshield, and Back Lights Installation	N/A	1994	7.59	The glass installation operation is subject to the VOC emission standard in Regulation 7.59 and was installed after September 1, 1976.

ii. **Standards/Operating Limits**

VOC

- 1) Regulation 7.59, section 3.1.3 requires the source shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of 0.42 kg of VOC/l (3.5 lb VOC/gal) of coating, excluding water and exempt solvents, as applied for extreme performance coatings.
- 2) See Permit 245-09-C (R1) PAL limits

iii. **Monitoring**

VOC

Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit.

iv. **Record Keeping**

VOC

- 1) Regulation 7.59, section 6.1 and Regulation 2.16, section 4.1.9.2. requires sufficient record keeping to assure compliance with the terms and conditions of the permit.
- 2) Regulation 2.16, section 4.1.9.2. requires the source to monitor the *plant-wide* VOC emissions during each consecutive 12-month period to assure the emissions of VOC remain below the *plant-wide* PAL limit.

v. **Reporting**

VOC

Regulation 2.16, section 4.1.9.3. requires sufficient reporting requirements to assure compliance with the terms and conditions of the permit.

e. **Emission Unit U010 - E-Coat Operation**

i. **Equipment**

P/PE	Capacity	Installation Date	Applicable Regulation	Basis for Applicability
E10A E-Coat Dip Tank	N/A	1996	40 CFR 63 Subpart IIII	Subpart IIII Hazardous Air Pollutants: Surface Coating of Automobiles and Light.
			40 CFR 60 Subpart MM	
E10B E-Coat Oven	N/A	1988	40 CFR 63 Subpart IIII	Subpart MM establishes standards for National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations.
			40 CFR 60 Subpart MM	

E10C E-Coat Oven (3 rd Pass)	N/A	1996	40 CFR 63 Subpart III	
			40 CFR 60 Subpart MM	
E10D E-Coat Dump Metal AST	N/A	1996	40 CFR 63 Subpart III	
			40 CFR 60 Subpart MM	
E17A E-Coat Scuff Booth	N/A	1989	7.08	For Regulation 7.08 the scuff booth is subject to PM emission standard and was installed after September 1, 1976.

ii. **Standards/Operating Limits**

a. **VOC**

- 1) The E-Coat Operation is subject is subject to 40 CFR Part 63, Subpart III - Surface Coating of Automobiles and Light-Duty Trucks and 40 CFR 60, Subpart MM - National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations section 60.392 emission limits.
- 2) See Permit 245-09-C (R1) PAL limits

b. **PM**

- 1) The PM limits are calculated per Regulation 7.08, section 3.1.2. The equation to calculate the emission limits is $E = 3.59P^{0.62}$, where P is expressed in tons/hr.
- 2) See Permit 245-09-C (R1) PAL limits

c. **Opacity**

Regulation 7.08, section 3.1.2. establishes an opacity standard of less than 20%.

iii. Monitoring**a. VOC**

40 CFR Part 63, Subpart IIII - Surface Coating of Automobiles and Light-Duty Trucks and 40 CFR 60, Subpart MM - National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations sections 60.392 establishes monitoring requirements.

b. PM

Regulation 7.08 does not require any specific monitoring requirements for PM, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit.

c. Opacity

Regulation 7.08 does not require any specific monitoring requirements for opacity, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure compliance with the terms and conditions of the permit.

iv. Record Keeping**a. VOC**

40 CFR Part 60, Subpart MM - National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations sections 60.3095 and 40 CFR Part 63 - Surface Coating of Automobiles and Light Duty Trucks establishes record keeping requirement. Regulation 2.16, section 4.1.9.2 establishes record keeping requirements to assure ongoing compliance with the terms and conditions of the permit.

b. PM

See PM Monitoring.

c. **Opacity**

Regulation 7.08 does not require any specific record keeping requirements for opacity, however, Regulation 2.16, section 4.1.9.2. requires sufficient record keeping to assure ongoing compliance with the terms and conditions of the permit.

v. **Reporting**a. **VOC**

Regulation 2.16, section 4.1.9.3. establishes reporting requirements to assure ongoing compliance with the terms and conditions of the permit.

b. **PM**

Regulation 7.08 does not require any specific reporting requirements for PM, however, Regulation 2.16, section 4.1.9.3. requires reporting to assure compliance with the terms and conditions of the permit.

c. **Opacity**

Regulation 7.08 does not require any specific reporting requirements for opacity, however, Regulation 2.16, section 4.1.9.3. requires reporting to assure compliance with the terms and conditions of the permit.

f. **Emission Unit U011 - Guidecoat Operation**i. **Equipment:**

P/PE	Capacity	Installation Date	Applicable Regulation	Basis for Applicability
E11A Guidecoat Paint Booth and Air Supply Hose	N/A	1988	40 CFR 63 Subpart IIII	Subpart IIII Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks

			40 CFR 60 Subpart MM	Subpart MM National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations establishes standards.
E11B Touchup and Blackout Booth	N/A	1988	7.08	For Regulation 7.08 the scuff booth is subject to PM emission standard and was installed after September 1, 1976.
			7.59	The guidecoat operation is subject to the VOC emission standard in Regulation 7.59 and was installed after September 1, 1976.
E11C Guidecoat Ovens (1 st and 2 nd Pass)	N/A	1988	40 CFR 63 Subpart IIII	Subpart IIII Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks
			40 CFR 60 Subpart MM	
			7.08	
E11D Guidecoat Oven (3 rd Pass)	N/A	1988	40 CFR 63 Subpart IIII	Subpart MM National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations establishes standards. For Regulation 7.08 the equipment is subject to PM emission standard and was installed after September 1, 1976.
			40 CFR 60 Subpart MM	
			7.08	
E11E/E12G Guidecoat/Topcoat Paint Kitchen	N/A	1988	40 CFR 63 Subpart IIII	Subpart IIII Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks
			40 CFR 60 Subpart MM	Subpart MM National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations establishes standards.
E18A Guidecoat Scuff Booth	N/A	1989	7.08	For Regulation 7.08 the scuff booth is subject to PM emission standard and was installed after September 1, 1976.

ii. Standards/Operating Limits**a. VOC**

- 1) The Guidecoat Operation is subject to 40 CFR Part 63, Subpart IIII - Surface Coating of Automobiles and Light-Duty Trucks and 40 CFR 60, Subpart MM - National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations section 60.392 emission limits.
- 2) Regulation 7.59, section 3.1.3 requires the source shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for extreme performance coatings.
- 3) See Permit 245-09-C (R1) PAL limits

b. PM

- 1) The PM limits are calculated per Regulation 7.08, section 3.1.2. The equation to calculate the emission limits is $E = 3.59P^{0.62}$, where P is expressed in tons/hr.
- 2) See Permit 245-09-C (R1) PAL limits

c. Opacity

Regulation 7.08, section 3.1.2. establishes an opacity standard of less than 20%.

iii. Monitoring**a. VOC**

40 CFR Part 63, Subpart IIII - Surface Coating of Automobiles and Light-Duty Trucks and 40 CFR 60, Subpart MM - National Emission Standards of Performance for Automobile and Light Duty Truck Surface

Coating Operations sections 60.392 establishes monitoring requirements.

b. **PM**

Regulation 7.08 does not require any specific monitoring requirements for PM, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit.

c. **Opacity**

Regulation 7.08 does not require any specific monitoring requirements for opacity, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure compliance with the terms and conditions of the permit.

iv. **Record Keeping**

a. **VOC**

- 1) 40 CFR Part 60, Subpart MM - National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations sections 60.3095 and 40 CFR Part 63 - Surface Coating of Automobiles and Light-Duty Trucks establishes record keeping requirement. Regulation 2.16, section 4.1.9.2 establishes record keeping requirements to assure ongoing compliance with the terms and conditions of the permit.
- 2) Regulation 7.59, section 6.1 and Regulation 2.16, section 4.1.9.2. requires sufficient record keeping to assure compliance with the terms and conditions of the permit.

b. **PM**

See PM Monitoring.

c. **Opacity**

Regulation 7.08 does not require any specific record keeping requirements for opacity, however, Regulation 2.16, section 4.1.9.2. requires sufficient record keeping to assure ongoing compliance with the terms and conditions of the permit.

v. **Reporting**

a. **VOC**

Regulation 2.16, section 4.1.9.3. establishes reporting requirements to assure ongoing compliance with the terms and conditions of the permit.

b. **PM**

Regulation 7.08 does not require any specific reporting requirements for PM, however, Regulation 2.16, section 4.1.9.3. requires reporting to assure compliance with the terms and conditions of the permit.

c. **Opacity**

Regulation 7.08 does not require any specific reporting requirements for opacity, however, Regulation 2.16, section 4.1.9.3. requires reporting to assure compliance with the terms and conditions of the permit.

g. **Emission Unit U012 - Topcoat Operation**

i. **Equipment:**

P/PE	Capacity	Installation Date	Applicable Regulation	Basis for Applicability
E12A North Main Enamel Booth and Air Supply	N/A	1985	7.08	For Regulation 7.08 the scuff booth is subject to PM emission standard and was installed after September 1, 1976.
			7.59	The topcoat operation is subject to the VOC emission standard in Regulation 7.59 and was installed after September 1, 1976.
			40 CFR 63 Subpart IIII	Subpart IIII Hazardous Air Pollutants: Surface Coating of

				Automobiles and Light-Duty Trucks
			40 CFR 60 Subpart MM	Subpart MM National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations establishes standards.
E12B North Main Enamel Oven	N/A	1985	40 CFR 63 Subpart IIII	Subpart IIII Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks
			40 CFR 60 Subpart MM	Subpart MM National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations establishes standards.
E12C South Main Enamel Booth	N/A	1985	7.08	For Regulation 7.08 the scuff booth is subject to PM emission standard and was installed after September 1, 1976.
			40 CFR 63 Subpart IIII	Subpart IIII Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks
			40 CFR 60 Subpart MM	Subpart MM National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations establishes standards.
E12D Air Supply and Oven	N/A	1985	7.08	For Regulation 7.08 the scuff booth is subject to PM emission standard and was installed after September 1, 1976.
			40 CFR 60 Subpart MM	Subpart MM establishes standards for National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations.
E12F Air Supply House and Oven	N/A	1985	7.08	For Regulation 7.08 the scuff booth is subject to PM emission standard and was installed after September 1, 1976.
			40 CFR 60 Subpart MM	Subpart MM establishes standards for National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations.

E11E/E12G Guidecoat/Topcoat Kitchen	N/A	1988	40 CFR 60 Subpart MM	Subpart MM establishes standards for National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations.
E12H Topcoat Scuff Booth	N/A	1985	7.08	For Regulation 7.08 the scuff booth is subject to PM emission standard and was installed after September 1, 1976.
E12I TuTone/Repair Scuff Booth	N/A	1985	7.08	For Regulation 7.08 the scuff booth is subject to PM emission standard and was installed after September 1, 1976.

ii. **Standards/Operating Limits**

a. **VOC**

- 1) The Topcoat Operation is subject is subject to 40 CFR Part 63, Subpart IIII - Surface Coating of Automobiles and Light-Duty Trucks and 40 CFR 60, Subpart MM - National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations section 60.392 emission limits.
- 2) Regulation 7.59, section 3.1.3. requires the source shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for extreme performance coatings.
- 3) See Permit 245-09-C (R1) PAL limits

b. **PM**

- 1) The PM limits are calculated per Regulation 7.08, section 3.1.2. The equation to calculate the emission

limits is $E = 3.59P^{0.62}$, where P is expressed in tons/hr.

2) See Permit 245-09-C (R1) PAL limits

c. **Opacity**

Regulation 7.08, section 3.1.2. establishes an opacity standard of less than 20%.

iii. **Monitoring**

a. **VOC**

40 CFR Part 63, Subpart IIII - Surface Coating of Automobiles and Light-Duty Trucks and 40 CFR 60, Subpart MM - National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations sections 60.392 establishes monitoring requirements.

b. **PM**

Regulation 7.08 does not require any specific monitoring requirements for PM, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit.

c. **Opacity**

Regulation 7.08 does not require any specific monitoring requirements for opacity, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure compliance with the terms and conditions of the permit.

iv. **Record Keeping**

a. **VOC**

1) 40 CFR Part 60, Subpart MM - National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations sections 60.3095 and 40 CFR Part 63 - Surface Coating of

Automobiles and Light-Duty Trucks establishes record keeping requirement. Regulation 2.16, section 4.1.9.2 establishes record keeping requirements to assure ongoing compliance with the terms and conditions of the permit.

- 2) Regulation 7.59, section 6.1 and Regulation 2.16, section 4.1.9.2. requires sufficient record keeping to assure compliance with the terms and conditions of the permit.
- 3) Regulation 2.16, section 4.1.9.1 requires the source to monitor the *plant-wide* VOC emissions during each consecutive 12-month period to assure the emissions of VOC remain below the *plant-wide* PAL limit.

b. **PM**

See PM Monitoring.

c. **Opacity**

Regulation 7.08 does not require any specific record keeping requirements for opacity, however, Regulation 2.16, section 4.1.9.2. requires sufficient record keeping to assure ongoing compliance with the terms and conditions of the permit.

v. **Reporting**

a. **VOC**

Regulation 2.16, section 4.1.9.3. establishes reporting requirements to assure ongoing compliance with the terms and conditions of the permit.

b. **PM**

Regulation 7.08 does not require any specific reporting requirements for PM, however, Regulation 2.16, section 4.1.9.3. requires reporting to assure compliance with the terms and conditions of the permit.

c. **Opacity**

Regulation 7.08 does not require any specific reporting requirements for opacity, however, Regulation 2.16, section 4.1.9.3. requires reporting to assure compliance with the terms and conditions of the permit.

g. **Emission Unit U013 - Plant-wide Product Fueling**

P/PE	Capacity	Installation Date	Applicable Regulation	Basis for Applicability
E13A Gasoline Tank #1	20,000 gallons	1990	7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)
E13B Gasoline Tank #2	20,000 gallons	1990	7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)
E13C Gasoline Tank #3	20,000 gallons	1990	7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)
E13D Two Fueling Stations with Vapor Recovery	N/A	1994	7.25	ORVR Equipped Vehicles

ii. **Standards/Operating Limits****VOC**

Regulation 7.15 requires that storage tanks shall be equipped with the following:

- a. A submerged fill pipe;
- b. If the gasoline storage tank is equipped with a separate gauge well, a gauge well drop tube shall be installed which extends to within six inches of the bottom of the tank;
- c. Vent line restrictions on the affected facility; and

- d. Vapor balance system and vapor tight connections on the liquid fill and vapor return hoses. The cross-sectional area of the vapor return hose and any other vapor return passages in the circuit connecting the vapor space in the service station tank to that of the truck tank must be at least 50% of the liquid fill hose cross-sectional area for each tank and free of flow restrictions to achieve acceptable recovery. The vapor balance equipment must be maintained according to the manufacturer's specifications. The type, size and design of the vapor balance system are subject to the approval of the District.

- iii. **Monitoring**

VOC

Regulation 7.15 does not require any specific monitoring requirements for VOC, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit.

- iv. **Record Keeping**

VOC

Regulation 7.15 does not require any specific record keeping requirements for VOC, however, Regulation 2.16, section 4.1.9.2. requires sufficient record keeping to assure ongoing compliance with the terms and conditions of the permit.

- v. **Reporting**

VOC

Regulation 2.16, section 4.1.9.3. establishes reporting requirements to assure ongoing compliance with the terms and conditions of the permit.

h. Emission Unit U014/U022 – Paint Equipment Cleaning Operation

P/PE	Capacity	Installation Date	Applicable Regulation	Basis for Applicability
E14 Paint Equipment Cleaning Booth	N/A	1985	7.25	This regulation applies to each existing auto and truck manufacturing facility which was in being or had a construction permit issued by the District before June 13, 1979
E22A Paint Equipment Purging and Plant Cleaning	N/A	1976	7.25	This regulation applies to each existing auto and truck manufacturing facility which was in being or had a construction permit issued by the District before June 13, 1979
Solvent Metal Cleaning Equipment	N/A	N/A	6.18	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)

ii. Standards/Operating Limits**VOC**

- 1) The source shall follow the procedure below to minimize VOC emissions from purge and cleaning operations under Regulation 7.25, section 3.
- 2) For all cold solvent parts washers, the source shall comply with the standards of Regulation 6.18, sections 4.1 through 4.3.

iii. Monitoring**VOC**

Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit.

iv. Record Keeping

VOC

Regulation 2.16, section 4.1.9.2. requires sufficient record keeping to assure ongoing compliance with the terms and conditions of the permit.

v. **Reporting****VOC**

Regulation 2.16, section 4.1.9.3. establishes reporting requirements to assure ongoing compliance with the terms and conditions of the permit.

i. **Emission Unit U015 - Sealer Deck**

P/PE	Capacity	Installation Date	Applicable Regulation	Basis for Applicability
E15A Sealer Application	N/A	1994	7.59	The sealer operation is subject to the VOC emission standard in Regulation 7.59 and was installed after September 1, 1976.
Sealers and Deadeners (other than glass bonding)	N/A	N/A	40 CFR 63 Subpart IIII	Subpart IIII establishes standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks

ii. **Standards/Operating Limits****VOC**

- 1) Regulation 7.59, section 3.1.3. requires the source shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of 3.5 lb VOC/gal of coating, excluding water and exempt solvents, as applied for extreme performance coatings.
- 2) See Permit 245-09-C PAL limits

iii. **Monitoring****VOC**

Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit.

iv. **Record Keeping****VOC**

- 1) Regulation 7.59, section 6.1 and Regulation 2.16, section 4.1.9.2. requires sufficient record keeping to assure compliance with the terms and conditions of the permit.
- 2) Regulation 2.16, section 4.1.9.2. requires the source to monitor the *plant-wide* VOC emissions during each consecutive 12-month period to assure the emissions of VOC remain below the *plant-wide* PAL limit.

v. **Reporting****VOC**

Regulation 2.16, section 4.1.9.3. establishes reporting requirements to assure ongoing compliance with the terms and conditions of the permit.

j. Emission Unit U016 - Final Repair Spray Booth; infrared curing, and spot repair bays for repairing coating on vehicles

P/PE	Capacity	Installation Date	Applicable Regulation	Basis for Applicability
E16A Final Repair Booth	N/A	1982	7.08	For Regulation 7.08 the scuff booth is subject to PM emission standard and was installed after September 1, 1976.
			40 CFR 63 Subpart IIII	
			40 CFR 60 Subpart MM	
E16B Final Repair Oven	N/A	1982	7.08	Subpart IIII establishes standards for Hazardous Air Pollutants: Surface Coating

P/PE	Capacity	Installation Date	Applicable Regulation	Basis for Applicability
			40 CFR 63 Subpart III	of Automobiles and Light-Duty Trucks
			40 CFR 60 Subpart MM	Subpart MM establishes standards for National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations.

ii. **Standards/Operating Limits**

a. **VOC**

- 1) The E-Coat Operation is subject to 40 CFR Part 60, Subpart IIII - Surface Coating of Automobiles and Light-Duty Trucks. 40 CFR 60, Subpart IIII section 60.392 emission limits.
- 2) See Permit 245-09-C (R1) PAL limits

b. **PM**

- 1) The PM limits are calculated per Regulation 7.08, section 3.1.2. The equation to calculate the emission limits is $E = 3.59P^{0.62}$, where P is expressed in tons/hr.
- 2) See Permit 245-09-C (R1) PAL limits

c. **Opacity**

Regulation 7.08, section 3.1.2. establishes an opacity standard of less than 20%.

iii. **Monitoring**

a. **VOC**

40 CFR Part 60, Subpart IIII - Surface Coating of Automobiles and Light-Duty Trucks sections 60.392 establishes monitoring requirements.

b. **PM**

Regulation 7.08 does not require any specific monitoring requirements for PM, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit.

c. **Opacity**

Regulation 7.08 does not require any specific monitoring requirements for opacity, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure compliance with the terms and conditions of the permit.

iv. **Record Keeping**

a. **VOC**

- 1) 40 CFR Part 60, Subpart IIII - Surface Coating of Automobiles and Light-Duty Trucks sections 60.395 establishes record keeping requirement. Regulation 2.16, section 4.1.9.2. establishes record keeping requirements to assure ongoing compliance with the terms and conditions of the permit.
- 2) Regulation 2.16, section 4.1.9.2. requires the source to monitor the *plant-wide* VOC emissions during each consecutive 12-month period to assure the emissions of VOC remain below the *plant-wide* PAL limit.

b. **PM**

See PM Monitoring.

c. **Opacity**

Regulation 7.08 does not require any specific record keeping requirements for opacity, however, Regulation

2.16, section 4.1.9.2. requires sufficient record keeping to assure ongoing compliance with the terms and conditions of the permit.

v. **Reporting**

a. **VOC**

Regulation 2.16, section 4.1.9.3. establishes reporting requirements to assure ongoing compliance with the terms and conditions of the permit.

b. **PM**

Regulation 7.08 does not require any specific reporting requirements for PM, however, Regulation 2.16, section 4.1.9.3. requires reporting to assure compliance with the terms and conditions of the permit.

c. **Opacity**

Regulation 7.08 does not require any specific reporting requirements for opacity, however, Regulation 2.16, section 4.1.9.3. requires reporting to assure compliance with the terms and conditions of the permit.

k. **Emission Unit U025 - Twelve (12) Direct Heat Exchangers**

U025 Emission Points			
ID	Description	Applicable Regulation	Control Device
E25	Direct Heat Exchangers	6.42	N/A
		7.08	

ii. **Standards/Operating Limits**

a. **PM**

The PM limits are calculated per Regulation 7.08, section 3.1.2. The equation to calculate the emission limits is $E =$

$3.59P^{0.62}$, where P is expressed in tons/hr. The maximum throughput is less than 1,000 pounds per hour; therefore, the PM emission standard is 2.34 lb/hr.

b. **Opacity**

Regulation 7.08, section 3.1.1. establishes an opacity standard of less than 20%.

c. **NOx**

Per Regulation 6.42, the owner or operator shall not allow or cause the *plant-wide* NOx emissions to equal or exceed 100 tons during any consecutive 12-month period in order to avoid NOx RACT.

iii. **Monitoring**

a. **PM**

There are no compliance monitoring requirements for this equipment. The potential uncontrolled PM emissions are less than the applicable emission standard.

b. **Opacity**

Regulation 7.08 does not require any specific monitoring requirements for opacity, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure compliance with the terms and conditions of the permit.

c. **NOx**

Regulation 7.08 does not require any specific monitoring requirements for NOx, however, Regulation 2.16, section 4.1.9.1. establishes monitoring requirements to assure ongoing compliance with the terms and conditions of the permit.

iv. **Record Keeping**

a. **PM**

There are no compliance record keeping requirements for this equipment. The potential uncontrolled PM emissions are less than the applicable emission standard.

b. **Opacity**

Regulation 7.08 does not require any specific monitoring requirements for opacity, however, Regulation 2.16, section 4.1.9.2. requires reporting to assure compliance with the terms and conditions of the permit.

c. **NO_x**

Regulation 7.08 does not require any specific record keeping requirements for NO_x, however, Regulation 2.16, section 4.1.9.2. requires sufficient record keeping to assure ongoing compliance with the terms and conditions of the permit.

v. **Reporting**

a. **PM**

There are no routine compliance reporting requirements for this equipment. The potential uncontrolled PM emissions are less than the applicable emission standard.

b. **Opacity**

Regulation 7.08 does not require any specific reporting requirements for opacity, however, Regulation 2.16, section 4.1.9.3. requires reporting to assure compliance with the terms and conditions of the permit.

c. **NO_x**

Regulation 7.08 does not require any specific reporting requirements for NO_x, however, Regulation 2.16, section 4.1.9.3. requires reporting to assure compliance with the terms and conditions of the permit.

III. Other Requirements

1. **Temporary Sources:** The source did not request to operate any temporary facilities.
2. **Short Term Activities:** The source did not report any short term activities.
3. **Emissions Trading:** N/A
4. **Alternative Operating Scenarios:** The source did not request to operate under any alternative operating scenarios.
5. **Compliance Status:** Ford Motor Company-Louisville Assembly Plant is required to submit their annual Compliance Certification to the District on or before April 15th of each calendar year. As of the effective date of Permit 245-09-C (R1), there are no compliance schedules in effect or progress reports required.
6. **Insignificant Activities**

Insignificant Activities		
Description	Quantity	Basis
Internal combustion engines fixed or mobile	Various	Regulation 2.02, Section 2.2
Presses extruding metal/mineral/wood	Various	Regulation 2.02, Section 2.3.1
Brazing, soldering or welding equipment	Various	Regulation 2.02, Section 2.3.4
Woodworking, except for conveying, hogging, or burning wood/sawdust	Various	Regulation 2.02, Section 2.3.5
Lab venting and exhaust systems (non radioactive materials)	Various	Regulation 2.02, Section 2.3.11
Ventilation systems - bakeries & restaurants	Various	Regulation 2.02, Section 2.3.12
Washing or drying fabricated metal or glass; non VOC use; no oil or solid fuel	Various	Regulation 2.02, Section 2.3.15

Insignificant Activities		
Description	Quantity	Basis
Residential/domestic equipment	Various	Regulation 2.02, Section 2.3.12
Portable diesel or gasoline storage tanks	Various	Regulation 2.02, Section 2.3.23
Diesel fuel storage tanks (emergency use only)	Various	Regulation 2.02, Section 2.3.25
Closed pressure storage vessels	2	Regulation 2.02, Section 2.3.26
Portable tote tanks for raw material shipment of solvent - based coatings	Various	Tote tanks are kept closed when not in use. Emission from tanks are negligible, and are accounted for by process material balance.
Backup generators for emergency power. (< 500 hrs/year)	2	Generators normal use is very low and HP <500 HP.
Wastewater Pretreatment system.	1	Emissions insignificant
Fluid Fill (hydraulic fluids, oil, anti-freeze) and Lubricating operations.	Various	Emissions insignificant due to low vapor pressure of materials used.
Miscellaneous maintenance procedures including lubrication, grinding, cleaning, woodworking, etc.	Various	Negligible emissions
Direct heat exchangers < 1 MM Btu/ hr	Various	Regulation 2.02, Section 2.1.1

- a. Insignificant Activities are only those activities or processes falling into the general categories defined in District Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Equipment associated with a specific operation or process (Emission Unit) shall be listed with the specific process even though there may be no applicable requirements. Information contained in the permit and permit summary shall clearly indicate that those items identified with negligible emissions have no applicable requirements.
- b. Activities identified in District Regulation 2.02, Section 2, may not require a

permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source.

- c. For all insignificant activities that emit regulated air pollutants for which the company has accepted a plant-wide synthetic minor limit, the company shall maintain sufficient records to calculate the emissions and report those emissions in the quarterly compliance reports and the annual emissions inventory report.
- d. The Insignificant Activities table is correct as of the date the permit was proposed for review by the USEPA, Region 4. The company shall submit an updated list of insignificant activities annually with the Title V compliance certification pursuant to District Regulation 2.16, section 4.3.5.3.6.
- e. In lieu of recording annual throughputs for each Insignificant Activity, the owner or operator may elect to report the Potential To Emit quantity listed in the Insignificant Activities table as the annual emission for each piece of equipment, since the emissions from the source's Insignificant Activities are minor.